Claims:

What is claimed is:

1. A low-profile ink jet cartridge assembly for an ink jet printer, the assembly comprising:

a substantially oblong ink jet cartridge body having a printhead side, opposing side surfaces attached to the printhead side and having a length, a height, and a width, wherein the length is greater than the height and the width;

a printhead containing a semiconductor substrate attached to the printhead side of the ink cartridge; and

a flexible circuit having a width, a length, a first edge along the length thereof, a second edge along the length thereof, first printer contact pads along at least a portion of the length thereof adjacent the first edge, and second printer contact pads along at least a portion of the length thereof adjacent the second edge, wherein the flexible circuit is electrically connected to the printhead, and wherein the portions of the flexible circuit containing the first and second contact pads are attached to the cartridge body on the opposing side surfaces of the cartridge body.

2. The ink jet cartridge assembly of claim 1 further comprising an alignment feature on the ink cartridge assembly for aligning the printer contact pads on the flexible circuit with electrical contacts on the ink jet printer when the ink cartridge is attached to the ink jet printer.

3. The ink jet cartridge assembly of claim 2 wherein the alignment feature comprises a keyhole-shaped opening in the flexible circuit.

4. The ink jet cartridge assembly of claim 2 wherein the alignment feature comprises a keyhole-shaped opening in the cartridge body.

5. The ink jet cartridge assembly of claim 2 wherein the alignment feature comprises a key for aligning with a keyhole-shaped opening on the printer.

6. A method for increasing a number of electrical contacts to an ink cartridge without significantly increasing a height dimension of the ink cartridge, comprising:

providing a substantially rectangular ink jet cartridge body having a printhead side, opposing, substantially parallel side surfaces attached to the printhead side and having a length, a height, and a width, wherein the length is greater than the height and the width;

attaching a printhead containing a semiconductor substrate to the printhead side of the ink cartridge;

providing a flexible circuit having a width, a length, a first edge along the length thereof, a second edge along the length thereof, first printer contact pads along at least a portion of the length thereof adjacent the first edge, and second printer contact pads along at least a portion of the length thereof adjacent the second edge, the first and second printer contact pads comprising a total number of electrical contacts;

connecting the flexible circuit in electrical communication with the printhead; and

attaching the portions of the flexible circuit containing the first and second contact pads to the opposing side surface of the cartridge body, wherein the total number of electrical contacts on the cartridge body is increased without significantly increasing the height of the cartridge body.

7. The method of claim 6 wherein the total number of electrical contact pads on the cartridge body is greater than a number of electrical contacts provided on a portion of a flexible circuit attached to only one side surface of a cartridge body.

8. The method of claim 6 further comprising providing an alignment feature on the ink cartridge body for aligning the first and second printer contact pads on the flexible circuit with electrical contacts on the ink jet printer when the ink cartridge is attached to the ink jet printer.

9. The method of claim 8 wherein the alignment feature comprises a keyhole-shaped opening in the flexible circuit.

10. The method of claim 8 wherein the alignment feature comprises a keyhole-shaped opening in the cartridge body.

11. The method of claim 8 wherein the alignment feature comprises a key for aligning with a keyhole-shaped opening on the printer.